Achieving Market Agility through Organizational Mindfulness towards IT Innovation and Information Processing Capacities

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Abstract

Firms encounter intense competition, market turbulence, and ever-changing technological innovation in today's dynamic business environment. Overcoming these challenges requires firms to develop their market agility capability in order to sense and respond environmental changes and seize emerging business opportunities. Although prior research has recognized the impact of information technologies (IT) as a critical facilitator on market agility, there is little focus on how organizational mindfulness might play a role in achieving market agility. We develop a conceptual model based on the information processing view (IPV) to investigate how organizational mindfulness towards IT innovation facilitates information process capacity, which in turn leads to higher market agility. This study provides conceptual evidence that firms can achieve superior market agility through creating an information processing capacity and that their managers need to be especially mindful in IT innovation.

1. Introduction

Today's dynamic business environment means that every day firms must deal with intense competition, market turbulence, and ever-changing technological innovations. Failure to respond to these challenges may lead to business failure. For example, Kodak has recently filed for bankruptcy protection, partly because they were not able to transition quickly enough to the digital photography technology that now dominates their industry. Companies must be constantly aware of any changes and be ready to deploy their resources, including technology, staff, and finance, quickly to respond to sudden changes in the marketplace. Goldman et al. (1995) label this capability "market agility," suggesting that firms with market agility are able to sense and react to internal and external opportunities and threats in their environment very quickly. They contend that these firms have survived, and even thrived, in an environment that is increasingly

dominated by massive change and high uncertainty. Market agility is therefore attracting considerable attention from both researchers and practitioners.

Many studies have been devoted to understanding the development of market agility from the resource based view (RBV), with the majority identifying information technology (IT) as an important resource in forming the ability (Bharadwaj, 2000; Seo and La Paz, 2008; Lu and Ramamurthy, 2001). To stay alert and responsive, firms need to follow trends in the market, track technological innovations, identify and evaluate current and potential competitors, develop good communication conduits with customers, and establish novel and flexible connections with suppliers. These processes all involve one important element: information. Appropriate information is highly critical for detecting and acting on changes in the environment (Thomas et al., 1993). Firms that can collect and process information quickly are also associated with high agility in environmental changes (Kuvaas, 2002). An organization's agility clearly depends on its ability to access information and then act on it. The application of IT lies at the heart of this process, as it has the potential to increase firms' ability to collect, disseminate, store, analyze and display information, all of which strengthens firms' ability to process information. Thus, we argue that instead of simply grounding market agility research in the RBV, it is equally important to investigate market agility from the information processing view (IPV).

According to the IPV, an organization can be considered as an imperfect information processing system because of its inevitably incomplete information and limited information processing capacity (IPC) (Galbraith, 1974). Incomplete information, largely due to limited IPC, results in poor decision making and this poor decision making will, of course, impact a firm's performance (Galbraith, 1974). Because of this, organizations are continuously developing strategies and refining their organizational structures to increase their ability to gather more complete information and improve performance (Kuvaas, 2002; Kohli and Grover, 2008). This ability is the firm's IPC (Galbraith, 1974). High IPC indicates an ability to collect and process external and internal signals and thus provide timely alerts to managers (Kuvaas, 2002; Wang, 2003; Premkumar et al., 2005). With sufficient information, managers quickly recognize the importance of these signals from both internal and external environments and take prompt and appropriate action (Seo and La Paz, 2008). Thus, we argue that IPC increases market agility.

The IPV suggests IT is an important part of IPC. For example, IT applications such as resource planning systems can link various stakeholders in an organization more closely and effectively, thus increasing the accuracy, reliability, and timeliness of the information needed for tasks like forecasting and planning (Banker et al., 2006). However, firms cannot realize IT's value unless they can fully utilize the application. A firm's "IT capability" is the collection of processes that impact its ability to use IT, facilitating managers' reaction to environmental changes (Bharadwaj et al., 2002; Lu and Ramamurthy, 2011; Wang and Hajli, 2017). Banker and colleagues (2006) found that higher IT capacity is associated with higher production flexibility and agility in manufacturing plants, while Pavlou and El Sawy (2010) found firms with high IT

capability are more agile in new product development and are able to move into new competitive positions in a very short period of time when facing discontinuities in the environment. Both these examples illustrate the role of IT capability in providing relevant information when agility is needed by the adopting organization (Chen et al., 2014). Therefore, we argue that IT capability reflects IPC and thus has an impact on the firm's market agility.

Furthermore, according to the contingency feature of the IPV, IPC needs to closely match the information processing needs of the company in order to improve a firm's performance (Galbraith, 1974; Tushman and Nadler, 1978; Daft and Macintosh, 1981; Wang, 2003). Firms may need to adjust or even introduce new IT applications in order to reach the desired IPC. This means a firm's IT needs to be flexible regarding these activities. Hence we argue that IT must be managed proactively to reduce the possibility of rigidity resulting from IT applications, instead of agility (Overby et al., 2006). Following this argument, this research includes organizational mindfulness towards IT innovation as an antecedent of IPC, as it will also impact a firm's IT capability.

2. Theoretical Background

2.1. Information processing view (IPV)

IPV emerged in the context of organizational structure design based on Simon's (1957) assumption that the human cognitive limit is an inevitable constraint for any activities that involve information. However, information is necessary for all kinds of organizational operations, from daily routines to strategic decision making. Thus, it is important for organizations to cope with this limitation, which can be achieved through the design of the organizational structure. According to IPV, there are two factors that contribute to the human cognitive limit: uncertainty and equivocality (Tushman and Nadler, 1978; Daft and Macintosh, 1981; Daft and Lengel, 1986); uncertainty is created by inadequate knowledge and information (Karimi et al., 2004), while equivocality is created by the ambiguity of the information (Tushman and Nadler, 1978; Daft and Macintosh, 1981). Within a turbulent business environment, organizational decision making and operational processes are clearly governed by great uncertainty and equivocality (Melville and Ramirez, 2008). Galbraith (1974) suggests this cognitive limit restricts managers' ability to complete tasks; as uncertainty and equivocality increase, organizations must alter their task completion processes because of the various unforeseen changes and misunderstandings. Managers need to constantly seek additional information or resources or devote extra time and effort to clarify the situation, both of which increase the amount of activities related to information processing (Tushman and Nadler, 1978; Daft and Macintosh, 1981). Thus, uncertainty and equivocality increase the information processing requirement (IPR) that organizations need to develop higher information processing capacity (IPC) to address the higher IPR.

2.2. Information processing capacity (IPC)

IPC refers to a firm's ability to address the IPR generated in the environment (Kuvaas, 2002; Kohli and Grover, 2008). As this definition indicates, IPC consists of two components: IPR reduction and information processing. IPR reduction refers to a firm must design processes to reduce the uncertainty and equivocality in the information by reducing the amount of irrelevant information included and the vagueness of the information, thus improving the quality of the data supplied and reducing the time and effort needed to process it (Galbraith, 1974). Information processing relates to a firm's ability to act on the information collected, including the collection, organization and exploitation of the information, as well as its use to support business operations (Galbraith, 1974). One key feature of IPC is to facilitate the activities of decision makers by providing proper information in a timely manner. Thus, organizations that possess a high level of IPC monitor the environment better and are more sensitive to market changes and events (Kuvaas, 2002).

IPC has been applied in various research streams, such as the design of organizational structures and control mechanisms (Galbraith, 1974; Shockley et al., 2011), and IT adoption (Gattiker and Goodhue, 2004; Premkumar et al., 2005). In IT adoption literature, IT adoption has been considered as a means for improving firms' information processing capacity (Galbraith, 1974; Premkumar et al., 2005). On one hand, IT can enhance information processing procedures such as data collection, storage, analysis, display and dissemination. For example, data warehouse and data mining technologies are widely used to organize large quantities of data and perform data analyses for various purposes. On the other hand, IT can reduce the IPR by increasing the communication and collaboration among different individuals and parties within and across firms. Research has found that the information sharing and dissemination made possible by IT could reduce the uncertainty (Galbraith, 1974; Premkumar et al., 2005), demonstrating that IT is indeed an important part of the IPC. However, notwithstanding the considerable research in IPC (e.g., Gattiker and Goodhue, 2004), there has been little attention given to improving our understanding of impact of IPC on organizational performance, particularly in market agility.

2.3. Market agility

Market agility is the firm-wide ability to stay alert to changes that occur in the dynamic business environment and quickly deploy resources to respond in a creative way (Goldman et al., 1995; Dove, 2001). Based on this definition, agility is comprised of two parts: alertness and the response. According to Dove (2001), alertness refers to a firm's ability to detect environmental changes and notice the underlying opportunities. These often unpredictable changes raise the level of uncertainty and prevent firms from being able to accurately forecast market conditions and plan their business activities accordingly. In this paper, environmental change includes variations in the general and task environment dimensions, namely technology, politics and regulation, economics, international situations, suppliers, customer preference, labor market, and competitor actions (Daft and Marcic, 2012). Response relates to a firm's ability to perform proper

activities after receiving signals from the environment. Decisions have to be made based on the information collected and the knowledge accumulated in the organization and then the firms deploy or acquire resources, such as labor, finance, and IT, in order to carry out those decisions appropriately. Most of the time these responses are not pre-designed and may vary considerably (Sambamurthy et al., 2003; Van Oosterhout et al., 2006). According to different changes in the environment, firms ideally vary their processes to match these changes. For example, firms may need to launch new products to react to emerging technological innovations in the industry or redesign a current business process to cope with new regulations.

In a business context, agility is not the same as flexibility, which is another concept that is also often related to a firm's success or otherwise in a turbulent environment. Flexibility has been defined as an organization's various managerial capabilities for dealing with a dynamic market. Firms build flexibility by encouraging diversity in resources and management options, for example by creating a variety of products that target different customers. This allows them to react effectively in response to change (Grewal and Tansuhaj, 2001). Based on this description, flexibility is a predesigned feature of resource configurations in organizations. When designing an organization's structure and business processes, managers must embed flexibility in both the structure and processes that will be capable of dealing with forecasts of future changes and organizational needs. Therefore, a firm's flexibility tends to solve changes that are somewhat predictable, and the response is likely programmed within the processes and the given structure of the organization (Van Oosterhout et al., 2006).

However, not all of these changes have elements of predictability with a probable response. Organizations often need to deal with radical or innovative changes that cannot be planned for beforehand. This is when agility is required. In other words, agility supplements organizational flexibility by enabling firms to quickly and easily react to changes caused by novel or unpredictable catalysts (Overby et al., 2006; Van Oosterhout et al., 2006). The ability to rapidly implement an effective response to unforeseen opportunities and threats is the source of sustainable competitive advantage in most of today's organizations, especially in turbulent business environments (Pavlou and El Sawy, 2010).

3. Research Model and Proposition Development

According to the research model guiding this study (Figure 1), organizational mindfulness towards IT innovation and IT capability constitute a firm's IPC. Organizational mindfulness towards IT innovation will increase IT capability, which will in turn facilitate the firm's ability to address the information emerging from the environment and thus increase market agility. After presenting a review of the relevant literature and the hypotheses guiding this research, we will move on to describe the methodology of the empirical tests conducted, including data collection and analysis. This is followed by a discussion of the findings and implications of the study's findings.

We conclude the paper by examining the research limitations and making suggestions for future research.

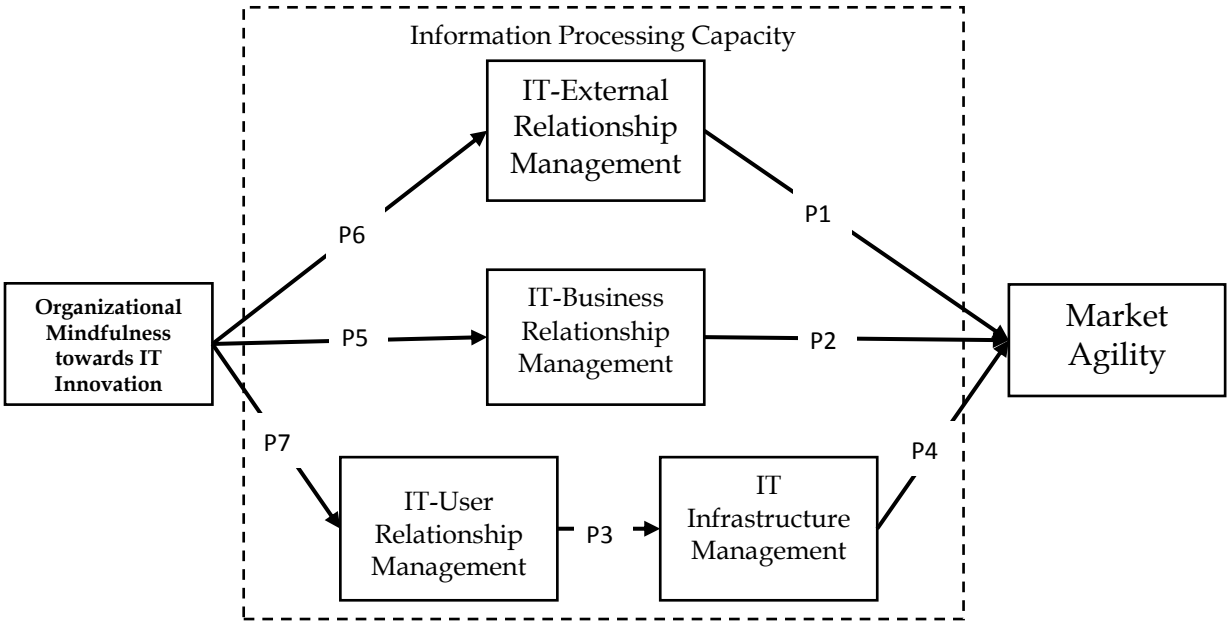

Figure 1. Conceptual model

3.1. IT enabled market agility

Research has demonstrated that incorporating IT into firms' operations enhances their market agility for competitive advantage (Sambamurthy et al., 2003). IT systems can increase a firm's speed and the effectiveness with which it can generate relevant market intelligence concerning emerging opportunities or changes in the competitive environment, disseminating such intelligence across departments, and responding with speed to the learning outcome from the firm's intelligence (Bharadwaj, 2000). Combining and integrating IT with business processes and networks can create an enhanced system that enables the firm to stay alert proactively to the market and obtain critical information ahead of competitors with lesser IT capabilities (Zaheer and Zaheer, 1997; Mathiassen and Pries-Heje, 2006). The deployment of appropriate IT applications can enhance corporate analysis, communication, and capability development. In order to achieve this IT enabled market agility, firms need to possess the ability to act quickly and provide fast delivery of IT solutions in response to changes in market conditions (Zaheer and Zaheer, 1997; Feeny and Willcocks, 1998). This includes collecting and acting on information about the influence of customers, technology, competitors, users, and other environmental forces —all of which relate to the IPC of the organization. Therefore, this research argues that the realization of IT enabled market agility is influenced by firms' IPC or, in this case, IT capabilities.

3.2. IT Capability and Market Agility based on IPV

IT capability has been defined as the ability to incorporate IT into the business in ways that enable superior competitive performance (Amit and Schoemaker, 1993; Wang and Byrd, 2017). According to RBV, it is a multidimensional construct that encompasses the integration of IT resources with both human and organizational resources (Bharadwaj, 2000). We argue that from the point of view of information processing, IT capability is a form of IPC that can address IT related IPR quickly and lead to better organizational performance. In this research, we examine IT capability from the IPV and suggest IT capability is a form of IPC. IPC includes IT infrastructure management, IT-external relationship management, IT-business relationship management, and IT-user relationship management. These capacities can not only reduce the equivocality in the information, but also shorten the information processing time by reducing unnecessary information flow within the organization. In this research, we use these four identified dimensions to examine the relationship between IT capability and market agility via IPV.

3.3. IT-external relationship management and market agility

IT-external relationship management refers to the ability to manage inter-organizational relationships between the firm and its external stakeholders with the goal of delivering high value IT applications. These external stakeholders include customers, suppliers, and partner firms. Relationship management with external customers allows the development of customer-oriented IT applications and services within the firm, while also building durable customer relationships in the process (BhaBharadwaj, 2000). The relationships with partners aim to leverage the IT capabilities of the firm's partners to the ultimate benefit of both (Jarvenpaa and Leidner, 1998). Entrepreneurial IT collaborations with external partners also ensure the development of appropriate IT systems and infrastructure among all the participating firms (Feeny and Willcocks, 1998) and encourages longer-term relationships that deliver higher-value returns. Furthermore, IT-external relationship management includes the ability to generate outsourcing solutions that meet business and IT needs by effectively managing externally supplied services provided through outsourcing (Benjamin and Levinson, 1993).

These three dimensions of IT external relationship management affect the level of information exchange among different parties. As inter-organizational relationships become stronger, firms develop tighter bonds with their external stakeholders. This implies the formation of lateral relationships and improves the feedback from different parties, bringing different views together. IT external relationship management also creates a highly connected information technology network that facilitates sophisticated interactions with suppliers and customers and fosters sharing of knowledge and customer information (Zaheer and Venkatraman, 1994). Thus, firms that have a high ability to work with and manage these external relationships gain from more timely and comprehensive information sharing through more effective IT resources. This has been suggested as an important facilitator for fast and efficient decision making (Eisenhardt, 1989), which allows firms to respond to the dynamic environment more rapidly (Mani et al., 2010). Thus we propose:

P1: IT-external relationship management has a positive effect on market agility.

3.4. IT-business relationship management

We define IT-business relationship management as the creation of a shared vision of the role of IT in the firm's business strategies and activities. A key element of this dimension is the ability to enable alignment—especially strategic alignment (Clemons and Row, 1991)—between the firm's IT experts and managers. Another important aspect of this dimension is the ability of IT and business management to clearly envision and openly discuss how IT contributes to business value within the firm's strategic framework (i.e., IT-business strategic vision) (Bharadwaj et al., 2002). Other features include the ability of IT and businesses to regularly consult with each other on both business and IT strategic decisions, and to possess a mutual understanding of each other's IT responsibilities Ross et al., 1996). This dimension includes the important view that IT managers and business managers should always be included as an important part of the firm's top management team, jointly planning the firm's business strategy (Feeny and Willcocks, 1998). Through IT and business integration, partnership and synergy between IT and business managers is created, which improves the effectiveness of IT-business joint decision making and IT implementation (Lu and Ramamurthy, 2011).

Greater IT-business relationship management is associated with higher IPC of the organization for a number of reasons. First, involving both IT managers and business managers in a firm's top management team can reduce unnecessary information flows by creating a lateral relationship between IT managers and other top managers. Such lateral relationships increase the speed in processing IT related information, thus increasing the efficiency and effectiveness of IT related decision making. Second, the collaboration between IT and business managers encourages frequent contact, teamwork and other formats of a lateral relationship process, which facilitates greater exchange of information and knowledge. According to IPV, this exchange reduces the uncertainty in information processing and allows for the rapid development and implementation of IT resources to address both opportunities and threats (Mani et al., 2010). Third, a high level of participation and interaction between IT experts and managers increases the accuracy of information interpretation, which reduces the level of equivocality in the information processing (Thomas and McDaniel, 1990). Again, this cuts the time needed to develop IT solutions to deal with internal and external problems. Furthermore, a clear vision and open discussion about IT's strategic role (i.e., IT-business strategic vision) facilitates mutual understanding between IT and business managers, such as each party's responsibility for IT implementation in the firm. Close collaborations between managers and IT experts increases the trust between IT and other business departments, all of which reduces the cognitive conflict in processing IT related information. Therefore, we argue that IT-business relationship management is an important part of creating high value IPC that can address the IPR of the organization. This argument is consistent with previous research, which has shown that a well-established IT-business partnership provides smoother decision making and more effective IT implementation, especially when radical

changes in business or IT are required, which typically occurs in turbulent markets (Mani et al., 2010) and early environmental diagnosis (Kuvaas, 2002). Therefore, in this research we argue:

P2: IT-business relationship management has a positive effect on market agility.

3.5. IT user management and IT infrastructure management

IT user management represents the ability to cultivate effective internal partnerships between IT providers and IT users in an organization, with the goal of promoting positive interaction and rich dialogue among the parties to deliver desired IT applications. An important characteristic of this dimension is the ability of IT providers to understand the overall business terminology, goals, processes, and concerns to help them see new ways that technology (i.e., hardware, software, etc.) can effectively be applied to support and enhance business functions (Ross et al., 1996; Feeny and Willcocks, 1998). A high level of understanding and support for IT users by IT providers can increase respect and cooperation and reduce conflicts and misunderstandings between them (Feeny and Willcocks, 1998). Other facets include the blending of business and technology expertise through the use of multi-disciplinary teams (Henderson, 1990), and IT users sharing IT project risk and responsibility with IT providers by sponsoring and supporting IT initiatives.

Building strong internal relationships between IT users and IT providers increases the IPC by helping to bridge the gaps that tend to exist between IT and functional areas. An enhanced collaboration not only reduces cognitive conflicts but also enhances lateral relationships. Such activities improve communication and trust among users and providers, which leads to better decision making that ensures performance advantage, such as developing innovative and strategic applications (Wade and Hulland, 2004).

The impact of IT user management on IT enabled market agility can be identified by its effect on IT infrastructure management. It has been suggested the impact of operational level performance on enterprise level performance can be identified through middle level contributions. User management is an operational level action, and market agility is a strategic level firm performance. Therefore, the contribution of this lower level IT management activity on market agility is likely to proceed via an intermediate level impact, in this case IT infrastructure management.

IT infrastructure management represents the ability to establish and maintain a flexible IT infrastructure that supports the current business and provides an agile foundation for business modifications in support of dynamic firm strategies. Features of this dimension include the ability to manage the infrastructure effectively to secure the firm's information (Marchand et al., 2000); to ensure superior storage and transmission, data processing capacity, and response times (Chen et al., 2012); and to enable a superior overall technology that is both appropriate for the business and reasonably consistent across the firm (Ross et al., 1996). Additional aspects of this dimension include the formulation of policies that can provide the proper integration and flexibility of IT services throughout the organization (Ross et al., 1996). All of these features facilitate

decision making by improving information collection and storage, as well as communication among different parties. Thus, the organization's IPC is increased.

IT infrastructure management could be manifested as increasing collaboration between users and IT specialists. It has been suggested that a shared understanding among users and IT providers impacts the selection and design of IT (Feeny and Willcocks, 1998; Endsley, 2012). By closely working with each other, IT providers gain better insights into business needs that enable them to develop more appropriate infrastructure to deliver the desired IT services and formulate policies that establish the flexibility needed to anticipate future demands. With IT infrastructure management, firms are able to quickly reconfigure or implement the new IT resources they need to deal with unexpected changes more easily.

Hence, we present the following:

P3: IT-user relationship management has a positive effect on IT infrastructure management.

P4: IT infrastructure management has a positive effect on market agility.

3.6. Organizational mindfulness towards IT innovation

According to IPV, a firm's IPC needs to match the IPR it is facing if it is to deliver optimum performance. Thus, a firm needs to be able to adjust its IT capability according to the environment. When the environment is turbulent, firms need high IPC to create market agility. However, a high-level of IT capability does not typically happen by chance. Organization personnel must be mindful about IT innovation adoptions and proactively manage their IT resources (Swanson and Ramiller, 2004). Organizational mindfulness towards IT innovation represents the activities of mindfully anticipating, planning, and managing IT strategic change related to technologies, such as changes in hardware, software, and applications, to deliver the IT applications needed to leverage a firm's performance, including market agility. Key aspects of this dimension include the accurate anticipation of technology change by using the firm's superior market intelligence to stay alert to future technology changes (Swanson and Wang, 2005), choosing platforms (including hardware, network, and software standards) that can accommodate technology change, and effectively managing the resulting IT change (Bharadwaj et al., 1999). These organizational mindfulness activities influence an organization's ability to managing changes in IT, including the infrastructure and the relationships. Thus, it can serve as an antecedent for the IPC, in our case, IT capability.

Through anticipating, planning, and managing technology change, organizational mindfulness towards IT innovation influences the relationships between those responsible for IT and the other functional areas of the firm (Wade and Hulland, 2004). In order to be mindful about IT applications, IT experts need to evaluate the potential benefit and impact they can bring to the organization and work with other managers in order to form accurate assessments of what is expected of them. Organizational mindfulness towards IT innovation also includes the restructuring of business and/or IT work processes to accommodate and allow for needed changes or to take advantage of

strategic opportunities (Lu and Ramamurthy, 2011). It encourages rich communications between business and IT. Thus, the relationship between IT and business should be increased by these activities. Thus we argue:

P5: Organizational mindfulness towards IT innovation has a positive effect on IT-business relationship management.

Organizational mindfulness towards IT innovation changes also means that firms will be seeking new IT applications or exploiting current ones constantly in order to optimize IT utilization. These activities enhance the outreach of a firm's external networks, such as partners and customers. It has been suggested that innovation, including IT applications, is diffused through different individuals or organizations (Valente, 1996). Therefore, it is important for a firm to build connections with external stakeholders, such as direct contacts or liaisons, in order to keep up with the development of IT solutions. These activities create or enhance the relationships between a firm and its external stakeholders. Also, seeking and exploiting activities provides more opportunities for inter-organizational collaboration. Therefore we can propose:

P6: Organizational mindfulness towards IT innovation has a positive effect on IT-external relationship management.

Organizational mindfulness towards IT innovation also implies a firm controls change based on new IT opportunities and experimentation with new IT advances (Swanson and Ramiller, 2004). An open culture of searching for new IT opportunities prompts a close collaboration of IT providers and users to leverage the IT utilization and exploration of new potential benefits from the firm's investment in IT. In such an environment, users are more familiar with IT and IT specialists have a better sense about business needs. In this way, firms are supported by the proper IT for sensing and collecting data from the changing environment. Thus, organizational mindfulness towards IT innovation facilitates the buildup of connections between IT providers and users. Hence, we propose:

P7: Organizational mindfulness towards IT innovation will improve IT-user relationship management.

4. Discussion and Conclusion

This research advances the theory of IPV by including IT capability in forming IPC. It has been suggested that IPV is one of the most significant contributions to the contingency literature in recent years. Unlike most IPV research, which focuses on IT adoption and organizational structure design, this study focused instead on the development and enhancement of lateral relationships and their relationship with IT infrastructure management.

Although it has been widely believed that lateral relationships that exist alongside the regular organizational structure tend to improve a firm's IPC and results in better performance, few empirical studies have been conducted to examine this assumption. Most of the current IPV studies involving IT focus on understanding the relationship between the technology and IPC. These studies are generally based on an important

assumption that the value of the technology is already realized by the firm. Little has been done to examine the role of a firm's IT capability in IPC, which is necessary to realize the value of technology. This study addresses this lack by proposing that IT capability can be considered as a form of IPC that includes both IT implementation and IT related lateral relationship management and arguing that by improving its IT capability, a firm will gain a higher IPC and thus improve their ability to address the IPR generated by the turbulent business environment, thus leading to better organizational performance.

Besides its contributions to academic research in this area, this study highlights a number of interesting implications for practitioners. First, the use of IPV in analyzing market agility reveals an interesting new way to look at the value of information to a firm. With the development of web based IT, particularly applications such as social media and networks, firms are faced with assimilating large amounts of information coming from a wide variety of sources. The challenge is to reduce unnecessary information processing, which leads to uncertainty and equivocality, as this not only influence effectiveness but also the efficiency of an organization's reaction toward the environment. Managers interested in developing market agility should focus on reducing the impact of uncertainty and equivocality in business processes through a better use of their IT resources and developing lateral relationships within their organizations, especially those involving IT personnel.

In conclusion, this study explores the relationship between IT and market agility from the point of view of information processing. We argue that IT could increase market agility through its impact on the organization's IPC, and the antecedent to this relationship is to manage IT proactively. A theoretical model was created to provide a comprehensive platform for testing the relationship.

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